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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/331,829	06/23/1999	HIROSHI SUZUKI	1576.77	2131

7590

12/05/2002

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EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 12/05/2002

29

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/331,829

Applicant(s)

SUZUKI ET AL.

Examiner

Robert Sellers

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on October 30, 2002 (Paper No. 28).
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 11-22 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

This is responsive to the Request for Continued Examination filed October 23, 2002 (Paper No. 26) along with the supplemental amendment filed October 30, 2002 (Paper No. 28).

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 11, 12 and 17, drawn to a composition comprising an epoxy resin, a curing agent and a tetrakisphenol, classified in class 528, subclass 88.
- II. Claims 13 and 14, drawn to a method for curing an epoxy resin comprising mixing a curing agent, a tetrakisphenol and an epoxy resin, classified in class 525, subclass 523.
- III. Claims 15 and 16, drawn to a curative for an epoxy resin comprising a tetrakisphenol clathrate and an epoxy group-reactive compound, classified in class 428, subclass 402.2.
- IV. Claims 18 and 19, drawn to a composition comprising an epoxy resin, a tetrakisphenol clathrate with an epoxy group-reactive compound, and a tetrakisphenol clathrate with a curing accelerator, classified in class 523, subclass 205.
- V. Claims 20 and 22, drawn to a method for curing an epoxy resin comprising mixing a tetrakisphenol clathrate and an epoxy group-reactive compound with an epoxy resin and heating to a predetermined temperature, classified in class 525, subclass 523.

Art Unit: 1712

- VI. Claims 21 and 22, drawn to a method for curing an epoxy resin comprising mixing a tetrakisphenol clathrate and an epoxy group-reactive compound, and a tetrakisphenol clathrate and a curing accelerator with an epoxy resin and heating to a predetermined temperature, classified in class 525, subclass 486.

The inventions are distinct, each from the other because of the following reasons:

Inventions III and I are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a curing agent for a carboxyl-terminated polyester and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions (I or III) and IV are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a coating formulation with respect to Group I, or a curing agent for a carboxyl-terminated polyester regarding Group III and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions (I or III) and (II or V) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used in a materially different process of using that product such as the latent curing of a carboxyl-terminated polyester.

Inventions IV and VI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used in a materially different process of using that product such as the latent curing of a carboxyl-terminated polyester.

The method of Group II is distinct from that of Group V because the heating to a predetermined temperature of Group V is a materially different additional process step.

The method of Group II or V is distinct from that of Group VI since the further blending of the tetrakisphenol clathrate and curing accelerator is a materially different additional component.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Claims 11-22 are generic to a plurality of disclosed patentably distinct species comprising:

Contingent upon the election of Group I, II or V:

1) The epoxy resins such as the UVR-6410 which is a bisphenol A diglycidyl ether according to Chemical abstracts registry no. 25085-99-8.

2) The curing agents or epoxy group-reactive compounds such as the selection of one among those listed on page 22 of the specification.

3) The tetrakisphenols such as those listed on page 23.

Contingent upon the election of Group III:

Items 2) and 3) hereinabove.

Contingent upon the election of Group IV or VI:

Items 1), 2) and 3) hereinabove and

4) The curing accelerators such as the selection of one among those listed on page 22.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species within each of the appropriate items based on which Group is elected, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

A telephone call was made to Dennis G. LaPointe on December 3, 2002 to request an oral election to the above restriction and election of species requirement, but did not result in elections being made. The reply to this requirement to be complete must include an election of the invention and species to be examined even though the requirement be traversed (37 CFR 1.143).

Upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Some potential problems not conforming to 35 U.S.C. 112, first and second paragraphs, have been discovered regarding new claims 11-22. There is no support on page 6, the last two paragraphs and page 7, lines 6-7 for the curative agent being characterized as "non-clathrated" in claims 11 and 13. The term should be stricken and the phrase "curative agent" should be amended to the more art-recognized "curing agent."

There is no support for the tetrakisphenol by itself designated as a curing accelerator catalyst of claims 11 and 13 on page 6, lines 14-17 as described in the amendment filed September 21, 2001 (Paper No. 16, page 11) since the combination of the tetrakisphenol and curing accelerator functions to accelerate the curing of the epoxy resin.



The reiteration of formula (I) in dependent claims 12, 14, 19 and 22 is redundant since independent claims 11, 13, 17 or 18, and 20 or 21 already defines the structure.

There is no substantiation for the heating to a predetermined temperature of claims 20 and 21. Furthermore, there is no indication of the actual temperature range and whether the heating step functions as a preliminary pre-curing reaction or a curing reaction.

Page 10, lines 18-19 concisely identifies  $R^1$  to  $R^8$  of formula (I) as the substitution of the phenyl group with halogen or a  $C_1-C_6$  alkyl, or halogeno or a  $C_1-C_6$  lower alkoxy. Pages 6 and 7, line 3 as well as claims 11-22 define  $R^1$  to  $R^8$  as an "optionally-substituted phenyl, halogeno or a lower alkoxy." This species of  $R^1$  to  $R^8$  would be more clearly enabled and more concisely denoted as "a phenyl optionally substituted with halogen or  $C_1-C_6$  alkyl, a halogen or a  $C_1-C_6$  alkoxy."

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rs  
12/3/02